

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: Cook et al.) I hereby certify that this paper is being deposited with the United States Postal Service as first class
Serial No.: 09/866,311	mail, postage prepaid, in an envelope addressed to: Commissioner for Patents P.O. Box 1450,
Filed: May 25, 2001	Alexandria, Virginia 22313-1450, on this date:
For: "Hydraulic System for Wheeled Loader"	February 3, 2005
Group Art Unit: 3745	} found the
) I	Russell C. Petersen Registration No. 53,457 Attorney for Applicants
))

DECLARATION OF DAVID A. COOK AND BEN COVELL PURSUANT TO 37 C.F.R §1.131

We do hereby declare as follows:

- 1. We are the inventors of the subject matter disclosed and claimed in the above-captioned application.
- 2. We have been informed that the above-captioned application, US Application Serial No. 09/866,311 was filed on May 25, 2001 ("the US Application"), and that it claims priority from an earlier Great Britain application Serial No. 0012602.9, filed May 25, 2000 ("the priority application").
- 3. We submit this Declaration for the purpose of providing evidence that the subject matter claimed in the Application was conceived and reduced to practice in a WTO country as of a date prior in time to December 16, 1999.
- 4. We have been informed that A'Hearn et al., US Patent No. 6,357,320 (hereinafter, "A'Hearn", a copy of which is attached hereto as Exhibit "A"), was cited against the claims pending in the above-captioned U.S. Application.

- 5. We have been informed that the effective date of A'Hearn as an alleged prior art reference is December 16, 1999.
 - 6. We have read and understood A'Hearn.
- 7. To establish the date of conception of our invention prior to December 16, 1999, we provide evidence in the form of an internal memorandum (Exhibit B) detailing aspects of the Soft Ride System ("the SRS system) with Hose Burst Control Valve (HBCV), which were the internal names for the systems combined in the invention disclosed and claimed in the U.S. Application. The memorandum describes certain aspects relating to the structure and operation of the SRS system and the HBCV system. The date has been redacted from Exhibit B. The memorandum was prepared in a WTO country, where our invention was also conceived, prior to December 16, 1999.
- 8. To further establish the date of conception of our invention prior to December 16, 1999, we provide evidence in the form of another internal memorandum (Exhibit C), entitled "Engineering Team Key Issues (On-Going), which includes Item Number 14 relating to "Review SRS/120hp/5 speed/var. flow introduction . ". The memorandum also includes item 15 which relates to the SRS and states "Demo Smart forks, side shift, and SRS to JP." The date has been redacted, as have other items not related to the conception, reduction to practice, and/or development of the SRS system or components thereof. The memorandum was prepared in a WTO country, where the invention was also conceived, prior to December 16, 1999.
- 9. To establish reduction to practice of the invention prior to December 16, 1999, we provide evidence in the form of six (6) Work Area Orders (Exhibit D-1 through D-6) detailing still further aspects of the SRS system, including the development, testing, etc. of certain components and/or the entire system. Exhibits D-5 and D-6, in particular, indicate that the SRS system was constructed and tested for one week. The results of this test showed

that the SRS system, as outlined in the description and claims of this application, actually existed and worked for its intended purpose prior to December 16, 1999 in a WTO country. The dates have been redacted from Exhibits D-1 through D-6. The Work Area Orders were prepared in a WTO country prior to December 16, 1999.

- 10. To further establish the reduction to practice of our invention prior to December 16, 1999, we provide evidence in the form of an Engineering Drawing No. 042/E30018 entitled "Boom Suspension" (Exhibit E) which shows aspects of the hydraulic ride improvement circuit, and includes a written/graphical description of one embodiment of a hydraulic circuit for a loader arm machine in which the hydraulic circuit includes a ride improvement system that remains operable while the loader arm is raised or lowered. The date has been redacted from Exhibit E. The drawing was prepared in a WTO country, where our invention was also conceived, prior to December 16, 1999.
- All statements made herein of my own knowledge are true and all 11. statements made on information and belief are believed to be true; and further these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code, and such willful false statements may jeopardize the validity of the application or patent issued thereon.

1/13/05 Date

eppanen John Samuel Carell

JCB RESEARCH

PAGE 02

Internal

From B Covell

ADD

D Cook

Operation of SRS with HBCV.

Comments to be viewed in conjunction with drawing 042/\$30018,

When SRS is activated, valve A and B energise to allow flow to both the accumulator (E) on the annulus side of the cylinder (G) and dump to tank (P).

With SRS de-activated, both valves A and B are de-energised so system works as normal.

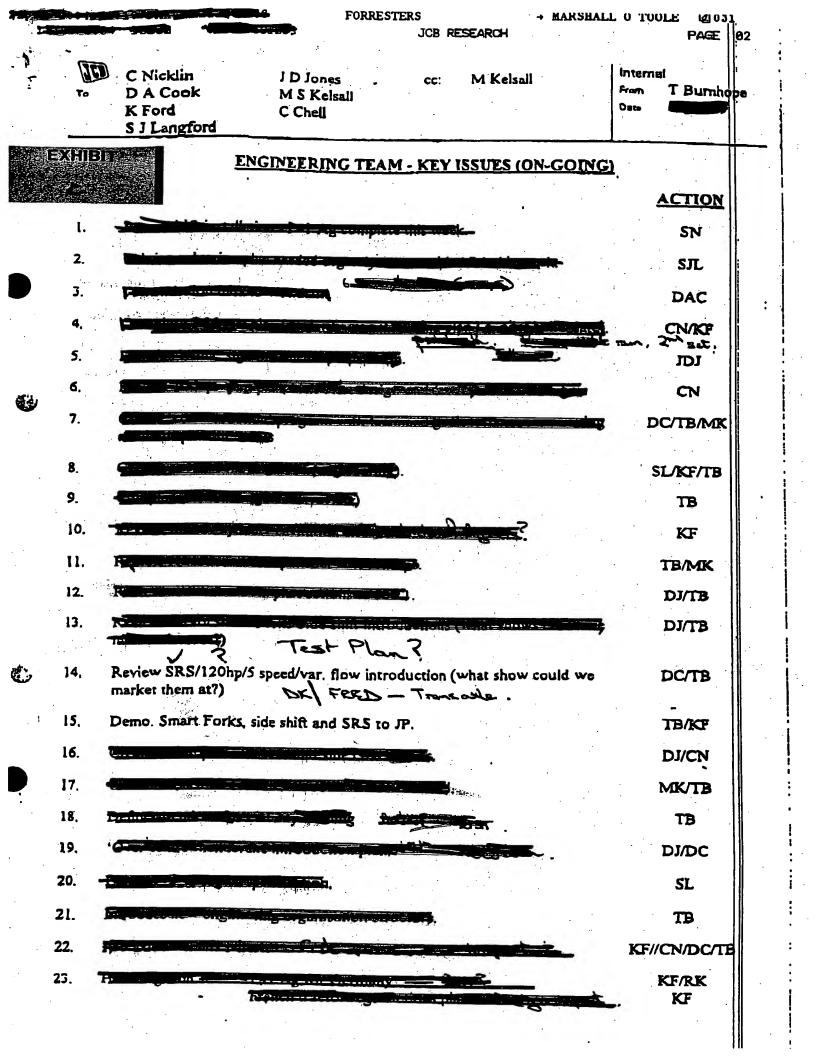
When SRS is activated, lift operates as normal, lower requires rise in pressure on the rod side of the cylinder to overcome HBCV (C).

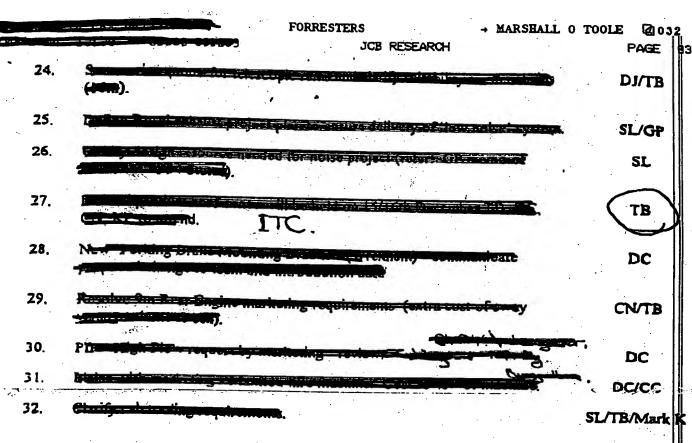
When lever in cab is positioned to lower, switch D senses position (i.e. lower), de-activating SRS system allowing pressure to rise on rod side of cylinder to open HBCV (C). Upon release of the lever from the lower position, SRS system is automatically re-engaged,

To conform to EN 1459 section 5.5.2.1 and 5.5.3.1, the accumulator (E), solenoid valves (A) and HBC (C) are in steel and mounted directly on the cylinder.

BEST AVAILABLE COPY







J. 9 Bute

T Burnhope Engineering Manager Loadall Division

tb/ac/054

Ø

FORRESTERS

→ MARSHALL O TOOLE 4033

RCENQR

RESEARCH CONTROL - DETAIL ENQUIRY Page 001

EI/J Number 83342.739 AJ Number Pr Originator R. WATERFALL Date Received

Project 500 P42

Description PLEASE COULD YOU FIT ANOTHER ACCUMULATOR TO THE

Target Date

SRS SYSTEM ON 172.

Work Area ASSY Order Description AS ABOVE.

Picklist

Location

Target Date

PFK3 Terminate, PFK4 Print,

PFK8 amend detail, PFK9 amend header



FORRESTERS → MARSHALL O TOOLE 2034 RESEARCH CONTROL - DETAIL ENQUIRY Page 001 RCENOR

EI/J Number 84142.121 Originator B COVELL Description SRS SYSTEM

AJ Number Date Received

Project 500 Target Date

Work Area TEST Order Picklist Location Target Date Description PLEASE PROVIDE SOMAT 2100 WITH FOUR ANALOGUE SLICES FOR TESTING.

R3 Terminate, PFK4 Print,

PFR8 amend detail, PFR9 amend header



RESEARCH CONTROL - DETAIL ENQUIRY Page 001

→ MARSHALL O TOOLE

EI/J Number 84142.129 Originator B COVELL Description SRS BRACKET

AJ Number Date Received

Project 500

Target Date

Work Area FAB Order Picklist Location Target Date Description PLEASE MANUFACTURER 2 OFF PLATES FROM 4MM PLATE TO PATTERN ON SHEET ATTACHED.

Terminate, PFK4 Print,

PPK8 amend detail, PFK9 amend header

FORRESTERS + 1
RESEARCH CONTROL - DETAIL ENQUIRY Page 001

→ MARSHALL O TOOLE

Ø 036

EI/J Number 84142.134 Originator B Covell

Tadmuk LA

Date Received

Project 500 .Target Date

Description 540-70 T72 SRS machine

Work Area FAB Order Picklist Location Target Date Description Please fit cylinder to machine and check clearance

at full boom rotation and lower.

If cylinder is ok, please remove and paint

(yellow) .

Re-fit cylinder to m/c along with pressure switch

in cab.

If there are any problems please contact me.

PFK3 Terminate, PFK4 Print,

PFK8 amend detail, PFK9 amend header

EXHIBIT

RESEARCH CONTROL - DETAIL ENQUIRY

Page 001

EI/J Number 84142.137 Originator B Covell

AJ Number

Date Received

Project 500 Target Date

Description SRS system on 540-70 for trial.

Work Area TEST Order Picklist Location Target Date Description Please run m/c for one week to trial SRS system. As many drivers as possible would be preferable. The m/c is also fitted with a prototype airseat, please comment on this as well.

FR3 Terminate, PFK4 Print,

PFK8 amend detail, PFK9 amend header

FORRESTERS RESEARCH CONTROL - DETAIL ENQUIRY RCENOR

Page 001

→ MARSHALL O TOOLE 4038

EI/J Number 84142.139 AJ Number Originator B Covell

Date Received

Project 500

Description T72 540-70 SRS M/C

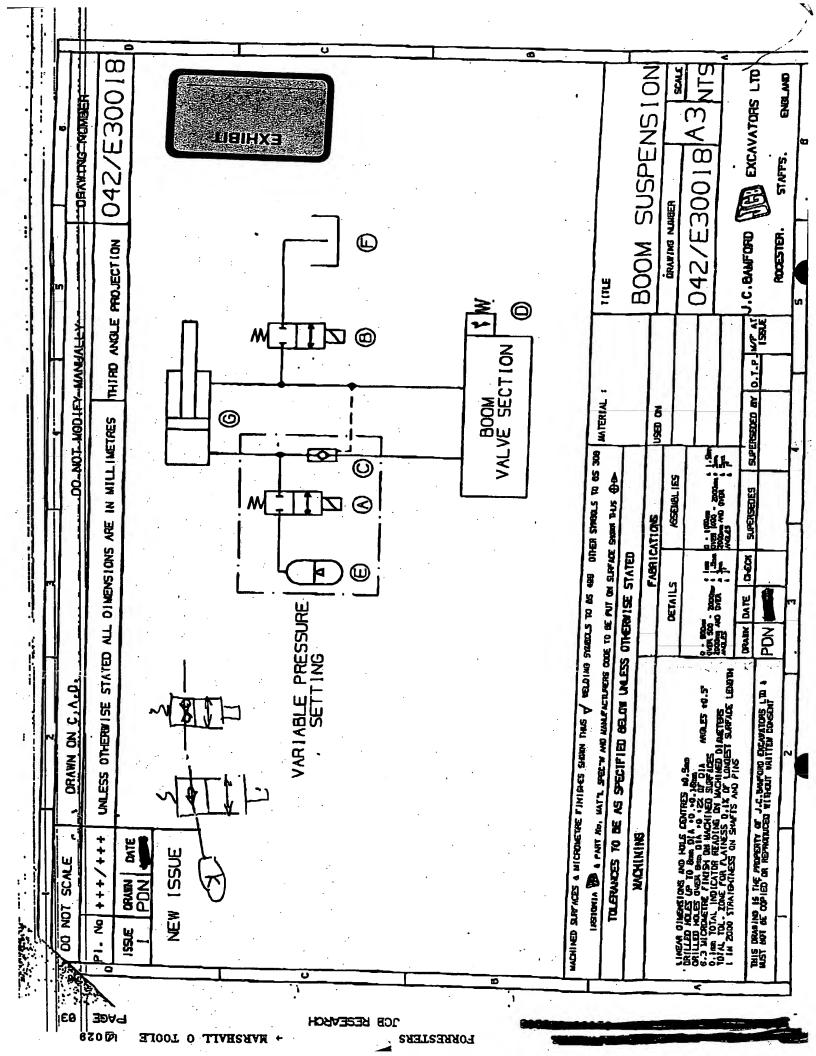
Target Date

Work Area FAB Order Picklist Location Target Date Description Please remove SRS system from m/c ready to fit to 120hp m/c.

This will only require the removal of the lift ram, which can be replaced with the original.

PFK3 Terminate, PFK4 Print,

PFR8 amend detail, PFR9 amend header



This Page is Inserted by IFW Indexing and Scanning Operations and is not part of the Official Record

BEST AVAILABLE IMAGES

Defective images within this document are accurate representations of the original documents submitted by the applicant.

Defects in the images include but are not limited to the items checked:

□ BLACK BORDERS
□ IMAGE CUT OFF AT TOP, BOTTOM OR SIDES
□ FADED TEXT OR DRAWING
□ BLURRED OR ILLEGIBLE TEXT OR DRAWING
□ SKEWED/SLANTED IMAGES
□ COLOR OR BLACK AND WHITE PHOTOGRAPHS
□ GRAY SCALE DOCUMENTS
□ LINES OR MARKS ON ORIGINAL DOCUMENT
□ REFERENCE(S) OR EXHIBIT(S) SUBMITTED ARE POOR QUALITY

IMAGES ARE BEST AVAILABLE COPY.

☐ OTHER:

As rescanning these documents will not correct the image problems checked, please do not report these problems to the IFW Image Problem Mailbox.